Koch, Kristine

From: MCCLINCY Matt <MCCLINCY.Matt@deq.state.or.us>

Sent: Thursday, September 10, 2015 8:39 AM

To: Sheldrake, Sean; Allen, Elizabeth; Koch, Kristine

Subject: RE: arkema napl

Yes, exactly.....

GP-22 was located in the uplands down gradient of the DDT manufacturing waste disposal pond. The chlorobenzene DNAPL was part of the DDT manufacturing residue know as red acid and takes on a blood color. It is very distinctive in the field both in color and odor. This DNAPL is found upland beneath the disposal pond/trench and on silt horizons at a depth of approximately 30 bgs. It is encountered continuously on the silt horizons from the pond/trench to the top of the bank. One of the objectives of the DEQ/Arkema phased In-water investigations was to determine if the DNAPL was present in sediment. The DEQ and subsequent EPA overseen work did not observe significant DNAPL in adjacent sediment. Are the sheens and NAPL blebs observed in sediment possibly related to the chlorbenzene DNAPL? Possibly, but the continuous, saturated horizons observed in the uplands were not observed in sediment. So, either there was not enough volume of DNAPL to migrate beneath the river or the silt horizons pinch out interrupting the lateral migration beneath the river.

The other possible DNAPI source to river sediment could have been out the former discharge pipe which DDT manufacturing residue was discharged during very early production. This is the horizon and location where the highest DDT concentrations are observed in river sediment. It is certainly possible that chlorobenzene DNAPL is present in the vicinity of this former outfall. However, the investigation work completed to date does not indicate that this is a significant area of NAPL saturated sediment.

It should also be noted that many of the off-shore borings were completed to bedrock.

Matt

Sheldrake, Sean [mailto:sheldrake.sean@epa.gov]
Sent: Wednesday, September 09, 2015 2:21 PM
To: Allen, Elizabeth; Koch, Kristine; MCCLINCY Matt

Subject: arkema napl

While we're talking about this...

http://yosemite.epa.gov/R10/CLEANUP.NSF/6d62f9a16e249d7888256db4005fa293/8172e7cf5715c9fa88257084007f1038/\$FILE/Arkema%20dnapl.jpg

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http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor

 $\underline{http://www.epa.gov/region10/dive/}$

206.553.6379 Dive Operations Center

206.369.7500 Dive Unit cell

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